

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
3 February 2005 (03.02.2005)

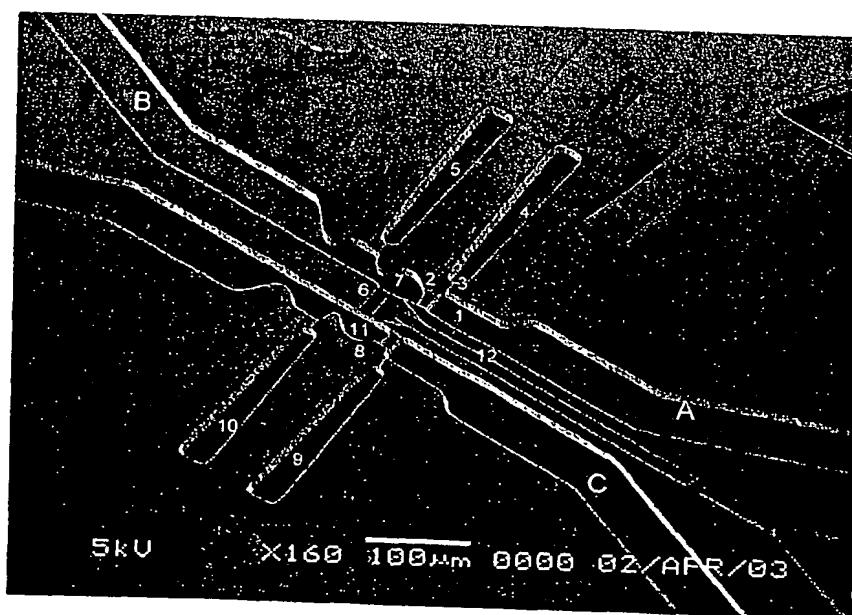
PCT

(10) International Publication Number
WO 2005/010147 A3

- (51) International Patent Classification⁷: G01N 21/00, (74) Agent: CLARK, Paul, T.; Clark & Elbing LLP, 101 Federal Street, Boston, MA 02110 (US).
- (21) International Application Number: PCT/US2004/018370
- (22) International Filing Date: 9 June 2004 (09.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/478,277 13 June 2003 (13.06.2003) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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(54) Title: DEVICE AND METHOD FOR CONTACTING POCOLITER VOLUMES OF FLUIDS



(57) Abstract: The invention features devices for mixing fluids, e.g., for lysing cells, and methods of use thereof. One device is based on the ability to control the flow of fluids, e.g., by contact angle and channel size. Fluids in this device can be divided to form segments of controlled volume, which are then brought together to initiate mixing. An exemplary use of the device is for the lysis of single cells. Another device is based on the ability to mix two fluids in a channel and affinity capture of analytes. The devices can be integrated on the same chip with other devices, for example, for cell handling or analysis of DNA, mRNA, and proteins released from the lysis of a cell.



Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:

14 April 2005